

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated June 2, 2005. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-20 are pending in this application. Claims 1, 6, 11, 17, 18, and 19 are independent claims.

In the Office Action, Claims 1-10 are rejected under 35 U.S.C. §101 because it is alleged that the claims are directed to non-statutory subject matter. The claims are amended herein to clarify that the method steps of Claims 1-10 are directed to (emphasis provided) "[a] machine-effected method for detecting a defect in an image, comprising the machine-effected steps" and are thereby in proper statutory form and clearly are directed to statutory subject matter and an indication to that effect is respectfully requested.

Claims 1-20 are rejected under 35 U.S.C. §103(a) as unpatentable over WO 99/14950 to Zhang ("Zhang") in view of U.S. Patent No. 5,574,640 to Sycara ("Sycara").

Zhang shows a system for automatic image repair. Particularly, Zhang teaches that (emphasis provided) "[b]ecause it [image repair] is implemented solely in the decoder, the present

invention can be implemented with any video transmission ..."

(See, Zhang, page 8, lines 35-40.) In fact, no where within the four corners of Zhang is an interactive session disclosed or suggested. In fact, Zhang teaches away from an interactive session because Zhang teaches that (emphasis provided) "[e]rrors introduced in the digital video bitstream by the transmission system cause the loss of video data, and lead to obnoxious artifacts in the output video sequence unless effective action is taken by the decoder."

(See, Zhang, page 1, lines 18-20.) Further, Zhang teaches that the purpose is to conceal the effects of image errors from a viewer (see, Zhang, page 1, line 21-34).

Even the Office Action realizes that "Zhang does not show details on repairing the image by an interactive session." (See, Office Action, page 3, lines 7-8.) As should be clear from the above, this statement in the Office Action while technically accurate, is misleading because Zhang specifically teaches an automated process with no interaction and further teaches away from user interaction since Zhang teaches to conceal the image errors from a viewer.

Sycara is cited for supplying this missing element of Zhang.

Sycara is a system for correcting errors in a schedule! (For example, see, Sycara, title, abstract, figures, summary, specification, etc.) There is no suggestion that Sycara is used for correcting image errors. Sycara in FIG. 1, block 4, shows "INTERACTIVE SCHEDULE REPAIR PROGRAM". The sections cited in the Office Action discuss a "scheduling system ..." (See, the Office Action, page 3, lines 8-9, citing Sycara, Col. 2, lines 45-56.)

The Office Action makes no attempt to reconcile how a system that teaches concealing image errors from a view (Zhang) can be combined with a schedule repair program (Sycara) to arrive at an interactive image repair system. Zhang in fact teaches away from this supposed obvious result (see above). "If when combined, the references 'would produce a seemingly inoperative device,' then they teach away from their combination." In re Spinnoble, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969). Further, there is no suggestion to modify a prior art reference where the modification would render the device inoperable for its intended purpose. In re Gordon, 733 F.2d 900 (Fed. Cir. 1984). It is the Applicant's position that the suggested combination would render Zhang inoperative. Accordingly, Zhang may not be combined with Sycara.

In fact, even in combination Zhang in view of Sycara clearly

does not disclose or suggest (emphasis provided) "[a] machine-effected method for detecting a defect in an image, comprising the machine-effected steps of: detecting a defect in said image; generating non-image data indicating properties of said image; and providing, responsive to a user request, said non-image data to an interactive session to repair said image" as required by Claim 1. While Sycara does suggest user interaction, it is directed to correcting errors in a schedule! Further, Zhang in view of Sycara does not disclose or suggest "[a] machine-effected method for repairing a defect in an image, comprising the machine-effected steps of: receiving a user identification of said defect; evaluating non-image data associated with said image indicating properties of said image that may be utilized to repair said defect; and repairing said defect using said indicated properties of said image" as required by Claim 6. In addition, Zhang in view of Sycara does not disclose or suggest "[a] system for detecting a defect in an image, comprising: a memory that stores computer-readable code; and a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to: detect a defect in said image; generate non-image data indicating properties of said image; and provide, responsive to a user request, said non-image data to

an interactive session to repair said image" as required by Claim 11. Zhang in view of Sycara also does not disclose or suggest "[a] system for repairing a defect in an image, comprising: a memory that stores computer-readable code; and a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to: receive a user identification of said defect; evaluate non-image data associated with said image, said non-image data indicating properties of said image that may be utilized to repair said defect; and repair said defect using said indicated properties of said image" as required by Claim 17. Further still, Zhang in view of Sycara does not disclose or suggest "[a]n article of manufacture for detecting a defect in an image, comprising: a computer readable medium having computer readable code means embodied thereon, said computer readable program code means comprising: a step to detect a defect in said image; a step to generate non-image data indicating properties of said image; a step to provide, responsive to a user request, said non-image data to an interactive session to repair said defect" as required by Claim 18. Lastly, with regard to the independent claims, Zhang in view of Sycara does not disclose or suggest "[a]n article of manufacture for repairing a defect in an image, comprising: a computer readable medium having computer

readable code means embodied thereon, said computer readable program code means comprising: a step to receive a user identification of said defect; a step to provide non-image data associated with said image, said non-image data indicating properties of said image that may be utilized to repair said defect; and a step to repair said defect using said indicated properties of said image" as required by Claim 19.

Based on the foregoing, the Applicants respectfully submit that independent Claims 1, 6, 11, 17, 18, and 19 are patentable over Zhang alone, or in combination with Sycara and notice to this effect is earnestly solicited. Claims 2-5, 7-10, 12-16 and 20 respectively depends from one of Claims 1, 6, 11, 18 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of said claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In fact, it is respectfully submitted that for each of the above rejections, while it is the Applicant's position that Zhang can not even be properly combined with Zhang since Zhang teaches away from any manual interaction (see above), the Office Action does not even provide a proper motivation to combine Zhang with Sycara.

With regard to the rejection of Claims 1-20 under 35 U.S.C. §103(a) as being obvious over Zhang in view of Sycara, the Office Action states that (emphasis provided) "[i]t would have been obvious to one of ordinary skill in the art ... to incorporate user interaction session taught in Sycara' teaching into Zheng's method of repairing the image because Zheng already discloses automatic detection and correction of defects." Yet where is this desirability suggested from either of Zheng or Sycara?

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1442, 1444 (Fed. Cir. 1992). See also **In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art of knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

When determining obviousness, "[t]he factual inquiry whether to combine references must be thorough and searching." **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ 1430, 1433 (Fed. Cir. 2002), citing **McGinley v. Franklin Sports, Inc.**, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001). "It must be based on objective

evidence of record." *Id.* "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617. "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." *Dembiczak*, 175 F.3d at 1000, 50 USPQ2d at 1617, citing *McElmurry v. Ark. Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

The suggestion in the Office Action that the combinations of prior art references "would be obvious to one having ordinary skill in the art ... " is respectfully refuted. One may not utilize the teachings of the present application as a road map to pick and choose amongst unrelated prior art references for the purposes of attempting to arrive at the presently disclosed invention. The Federal Circuit has identified three possible sources for motivation to combine references including the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. (See, *In re Rouffet*, U. S. Court of Appeals Federal Circuit, U.S.P.Q. 2d, 1453, 1458.) There must be a specific principle that would motivate a skilled artisan, with no knowledge of the present invention, to combine the prior art as suggested in the Office Action. The use

of hindsight in the selection of references is forbidden in comprising the case of obviousness. Lacking a motivation to combine references, a proper case of obviousness is not shown (see, *In re Rouffet*, 1458).

The U.S. Court of Appeals for the Federal Circuit (the "Federal Circuit") restated the legal test applicable to rejections under 35 U.S.C. § 103(a) in the *In re Rouffet*, holding. The Court stated:

[V]irtually all [inventions] are combinations of old elements. Therefore an Examiner may often find every element of a claimed invention in the prior art. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." To prevent the use of hind sight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. The Board [of Appeals] did not, however, explain what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination. ... To counter this potential weakness in the obviousness construct the suggestion to combine requirements stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.

In re Rouffet, 47 USPQ2d 1457-58 (Fed. Cir., July 15, 1998) (citations omitted, emphasis added).

More recently, the Federal Circuit again dealt with what is

required to show a motivation to combine references under 35 U.S.C. § 103(a). In this case the court reversed the decision of the Board of appeals stating:

[R]ather than pointing to specific information in Holiday or Shapiro that suggest the combination..., the Board instead described in detail the similarities between the Holiday and Shapiro references and the claimed invention, noting that one reference or the other-in combination with each other... described all of the limitations of the pending claims. Nowhere does the Board particularly identify any suggestion, teaching, or motivation to combine the ... references, nor does the Board make specific-or even inferential-findings concerning the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any factual findings that might serve to support a proper obviousness analysis.

In re Dembiczak, 50 USPQ2d 1614, 1618 (Fed. Cir., April 28, 1999) (citations omitted).

Thus, from both *In re Rouffet* and *In re Dembiczak* it is clear that the Federal Circuit requires a specific identification of a suggestion, motivation, or teaching why one of ordinary skill in the art would have been motivated to select the references and combine them.

The Examiner's reasoning for the motivation, namely, that those skilled in the art would have been motivated to combine Zheng with Sycara, could only have been made with hindsight based on the teachings of the present disclosure. The Examiner's reasoning for

the motivation for combining the references is nowhere recognized in the prior art nor does the Examiner attempt to make any showing that the art recognized such problems, in fact, Zheng teaches away from such a modification.

Where a feature is not shown or suggested in the prior art references themselves, the Federal Circuit has held that the skill in the art will rarely suffice to show the missing feature. Al-Site Corp. v. VSI International Inc., 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (Rarely, however, will the skill in the art component operate to supply missing knowledge or prior art to reach an obviousness judgment).

Thus, Applicants again respectfully submit that the Examiner has used impermissible hindsight to reject Claims 1-20 under 35 U.S.C. § 103(a).

As discussed above, the Federal Circuit in *In re Rouffet* stated that virtually all inventions are combinations of old elements. Therefore an Examiner may often find every element of a claimed invention in the prior art. To prevent the use of hindsight based on the invention to defeat patentability of the invention, the Examiner is required to show a motivation to combine the references that create the case of obviousness. Applicants respectfully submit that the Examiner has not met this burden.

The mere fact that the prior art device could be modified so as to produce the claimed device, which it clearly can not in this case (see the discussion above), is not a basis for an obviousness rejection unless the prior art suggested the desirability of the modification. See, *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984); and *In re Laskowski*, 871 F.2d 115, 117 (Fed. Cir. 1989).

It is the Applicants position that the only suggestion that can be found anywhere for making these combinations must come from the present patent application itself, since Zhang specifically teaches away from user interaction.

How can the Office Action espouse that this reconstruction forwarded does not include knowledge gleamed only from the applicant's disclosure? If this reconstruction did not come from the present application, where did it come from? The above reconstruction certainly did not come from the prior art. Even the Office Action does not point to any portions of the prior art for teaching the suggestion reconstructions/modification as pointed out above.

In consideration of the use of improper hindsight for rendering a claim obvious in light of prior art, the Federal Circuit has stated that "to draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest

that knowledge, is to use the invention as a template for its own reconstruction - an illogical and inappropriate process by which to determine patentability." (Sensonics, Inc. v. Aerosonic Corp., 81 F.3d 1566, 38 USPQ2d 1551 (Fed. Cir. 1996). "To imbue one of ordinary skill in the art with knowledge of the invention ensued, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." (In re Zurko, 111 F.3d 887, 42 USPQ2d 1476 (Fed. Cir. 1997). "A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field (cited reference omitted). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher (cited references omitted).'" (In re Kotzab, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000).

The applicants respectfully maintain that there is no suggestions in the prior art references to make the combinations in the manner proposed by the Examiner to achieve the applicants' claimed invention.

The Examiner is requested to consider MPEP 2143, wherein it is stated:

"THE PRIOR ART MUST SUGGEST THE DESIRABILITY OF THE CLAIMED INVENTION ... The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." And, "FACT THAT REFERENCES CAN BE COMBINED OR MODIFIED IS NOT SUFFICIENT TO ESTABLISH PRIMA FACIE OBVIOUSNESS ... The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)... Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.)"

The Office Action takes the position that "[m]ere incorporation of user interaction into the system which already

teaches automatic detection and correction of defects is not deemed to be patentably significant because the system of Zhang already performs what is intended for a user." (See, Office Action, page 3, lines 13-16.) This position is respectfully refuted because Zhang does not already disclose what is intended for the user. As should be clear from the above in fact, Zhang teaches away from this the presently claimed elements, and Sycara provides no support for this position either.

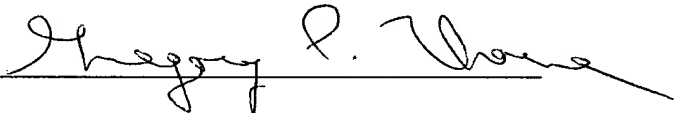
It is respectfully submitted that in light of the state of the law as set forth by the Federal Circuit, the lack of the present inventive elements being found in the prior art, and the Examiner's lack of specificity with regard to the motivation to combine the cited references, that the suggested combination of prior art utilized to reject each of Claims 1-20 finds no proper motivation for combination. Further, since the Office Action acknowledges that the prior art alone does not show the claimed features, it is respectfully requested that Claims 1-20 be allowed for these additional reasons and an indication to that effect is respectfully requested.

In addition, the Applicant denies any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. The Applicant reserves the right

to submit further arguments in support of the above stated position as well as the right to introduce relevant secondary considerations including long-felt but unresolved needs in the industry, failed attempts by others to invent the invention, and the like, should that become necessary.

Applicant has made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

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